REMARKS/ARGUMENTS

Claims 1, 2, 5-17, 19, 21, 22, 25-37, 39, and 42 are currently pending in this application. Claims 18 and 38 are canceled without prejudice. Claims 1, 18, 21, 39, and 42 are amended.

Claim Rejections - 35 USC §102

Claims 1, 8-15, 18, 21, 28-35, 38, and 42 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,259,919 to Suonvieri et al. (hereinafter "Suonvieri").

Claims 1, 2, 5-7, 14, 18, 21, 22, 25-27, 34, 38, and 42 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,564,042 to Jou et al. (hereinafter "Jou").

Claims 1, 14, 18, 19, 21, 34, 38, 39, and 42 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 7,058,414 to Rofheart et al. (hereinafter "Rofheart").

The Applicant respectfully disagrees for the following reasons. Claim 1 has been amended and now recites the following element which is not taught in any of the cited references:

> adjusting at least one signaling parameter based on the metric to compensate for the changes affecting the signaling path, the adjusting including at least one of: minimizing a data transfer rate while maintaining the signal path, minimizing a power level while maintaining the signal path, adjusting a forward error correction (FEC) coding rate, adjusting a modulation attribute, or adjusting a mobile station antenna characteristic

(emphasis added). Suonvieri is directed to detecting only the speed of a mobile unit and, if the speed exceeds a threshold, handing over the mobile unit to a larger cell

(See col. 1, lines 27 – 33; Figure 1; col. 3, lines 3 – 19 and 39—44). In Suonvieri a mobile station antenna characteristic is not changed; all changes occur at one or more base stations (See col. 3, lines 56—60; col. 5, lines 34—40). Suonvieri does not teach any of the features of claim 1 emphasized in the above quotation. The only action arising from measurements taught by Suonvieri is the aforementioned handover, and there is no teaching of how the larger cell is created. For all of these reasons, claim 1 is not anticipated by Suonvieri.

Jou is directed to detecting the speed of a mobile unit and, based on the detected speed, selecting a transmission power which simultaneously achieves predetermined target values for a data rate, a frame error rate, and a frame length, with a predetermined choice of forward error correction coding (col. 4, line 64 – col. 5, line 9). For determining the speed, Jou teaches three methods (col. 6, lines 1-5), none of which includes measuring a phase. Jou does not teach any of the features of claim 1 emphasized above. Jou is silent concerning the adjustment of any signal parameter except transmit power, which is accomplished by choosing from among predetermined values for a gain and a pilot channel power level (col. 4, line 64 – col. 5, line 9). As pointed out above, Jou requires simultaneously meeting target values for a data rate, a frame error rate, and a frame length; while claim 1 has no corresponding limitation. For all of these reasons, claim 1 is not anticipated by Jou.

Rofheart is directed to a wireless communication system in which a link between two units is either established or blocked based only on the distance between the units (col. 16, line 36 – 46; col. 17, line 55 – col. 19, line 16; col. 21, line 23—col. 25, line 31). The distance is determined by measuring a round-trip delay time of a signal while taking into account a predetermined processing delay for the individual remote unit involved (col. 23, line 59—col. 25, line 31; Figure 7; equations 9 and 10).

Rofheart does not teach measuring an amplitude, frequency, or phase and does not teach determining a change in a signaling path, since the distance between two units is measured as a static quantity. Rofheart does not teach the above emphasized features of claim 1. In fact, Rofheart teaches away from "minimizing a power level while maintaining the signal path" by teaching that communication is blocked, not maintained, for certain transmitter—receiver distances. See Abstract; col. 23, lines 23—29 and 40—44. For all of these reasons, claim 1 is not anticipated by Rofheart.

Claims 2, 5—15, and 19 are dependent on claim 1 and are therefore not anticipated by any of the cited references for the reasons presented above. The cancelation of claim 18 renders the rejection of this claim moot. Regarding claim 19, Rofheart teaches away from "maintaining the signal path" as noted above.

Amended claims 21 and 42 recite a feature corresponding to that of claim 1 quoted above and are therefore not anticipated by any of the cited references for reasons corresponding to those presented above. Claims 22, 25-37. and 39 are dependent on claim 21 and are therefore not anticipated by any of the cited references. The cancelation of claim 38 renders the rejection of this claim moot. Regarding claim 39, Rofheart teaches away from "maintaining the signal path" because communication is completely disabled, as noted above.

Based on the arguments presented above, withdrawal of the rejection of claims 1, 2, 5-15, 18, 19, 21, 22, 25-37, 39, and 42 under 35 USC §102(e) is respectfully requested.

Claim Rejections – 35 USC §103

Claims 16, 17, 36, and 37 are rejected under 35 U.S.C. §103(a) as being unpatentable over Suonvieri in view of U.S. Patent No. 5,940,454 to McNicol et al. (hereinafter "McNicol"). The Applicant respectfully disagrees for the following reasons. Claim 16 and 17 are dependent on claim 1. Claims 36 and 37 are dependent on claim 21. As presented above, claims 1 and 21 recite features not taught in Suonvieri. McNicol does not remedy the deficiencies of Suonvieri. McNicol is directed to selecting an antenna based on signal quality and is concerned only with antennas of fixed subscriber units, not mobile units. See Abstract and col. 6, lines 3-8. McNicol is silent as to the entire above quoted element of claim 1 and the equivalent element of claim 21. Furthermore, McNicol teaches away from the use of omnidirectional antennas at col. 9, lines 9-13.

Therefore, withdrawal of the rejection of claims 16, 17, 36, and 37 under 35 U.S.C. §103(a) is respectfully requested.

Conclusion

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephonic interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the present application is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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